SYNONYMICAL NOTE IN AECOPHORIDAE. (Lep.)

BY CARL HEINRICH.

SANTUZZA KUWANII Heinrich — ANCHONOMA XERAULA Meyrick.

In a letter of May 4, 1920, Mr. Edward Meyrick informed me that my Santuzza kuwanii, described in an earlier number of this journal (Proc. Frt. Soc. Wash., Vol. 22, pp. 43–47, 1920), is a synonym of Anchonema xeraula Meyrick (Bomb. Nat. Hist. Soc., Vol. 20, pp. 143–144, 1910). To enable him to pass with certainty on the identity of the two, since S. kuwanii was described from Japanese and A. xeraula from Indian and western Chinese material, I sent him a paratype of my species which he has since definitely determined as A. xeraula. Both the generic and the specific names (Santuzza and kuwanii) will therefore fall

NEW SPECIES OF PERTHALYCRA AND OSMODERMA, (Col.)

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Perthalycra carolina, new species.

Oblong oval, moderately convex, above finely punctured and with subrecumbent pale pubescence, head and thorax shining, elvtra less so. Color yellowish testaceous to castaneous, head darker, an ill-defined blackish discal spot sometimes present on each elytron. Head broad, punctuation moderately close and rather fine, sparser on the front which is flattened or a little concave, clypeus convex or tumid, separated from the front by a decided impression along the suture, anterior margin straight, the angles acute, labrum moderately deeply bilobed. Eyes prominent, rather small, coarsely granulate, hairy. Antennal club usually darker than the stem. Pronotum a little less than twice as wide as its median length, punctuation rather fine but very distinct, moderately close, scarcely more crowded laterally, sides beaded and fimbriate, moderately rounded, more rapidly convergent in front of the middle, all the angles strongly rounded, base slightly sinuate each side, broader than the apex and with a fine distinct marginal bead, apex broadly emarginate. Scutellum subtriangular, punctured, rounded at apex, about one-fourth wider than long and approximately one-seventh the length of the elytra. Elytra at base subequal in width to the thorax, conjointly very slightly narrowed and barely arcuate to about the middle, thence strongly rounded to their apices so as to form an obtuse reentrant angle at the suture. Punctuation fine, regularly disposed and without strial arrangement. Pygidium finely closely punctured and hairy. Body beneath finely punctured and pubescent. Legs punctured, moderately stout. Anterior tibiæ broad, apex sinuately subtruncate, bearing two short spines on its lower margin, outer margin finely crenulate, with a large apical tooth, the length of which is about equal to the adjacent tibial width and above which

are two stout tooth-like spines. Spur long, eurved, slender, blunt at apex. Middle tibiæ more slender, a little curved, somewhat expanded and sinuate towards the apex, spinose externally, spurs slender, the posterior one longer. Hind tibiæ similar. Length 3.75 mm., width, 1.90 mm.

Type and 2 paratypes in the United States National Museum, Type No. 23727, paratypes in the collection of the U. S. Biological Survey and of the author.

This species is described from eight specimens from Southern Pines, N. C. (type locality), collected with others under decaying fungus, Nov. 23, 1911, by Rev. A. H. Manee, and one specimen from Pensacola, Fla., collected Dec. 5, 1879 by E. A. Schwarz. These show some variation in color, as expressed by the description. The pubescence is easily abraded, some individuals being nearly naked above. The species has been distributed as Perthalycra murrayi Horn, which differs in being more coarsely punctured, especially on the pronotum, in the stronger fimbriation of the margin, and especially by the toothing of the front tibiæ. In P. murrayi the external prolongation of the tibia forms a bidentate process, while in carolina it is produced into a single long tooth. The crenulation of the outer margin of the fore tibia is more pronounced in murrayi and the spines near the middle are differently spaced. It would be interesting to know if the LeConte specimen from Georgia, mentioned by Dr. Horn in connection with the original description of P. murrayi, may possibly be P. carolina, since the two species have a strikingly similar superficial resemblance and seem to be absolutely congeneric in prosternal, antennal and other structural characters. The insect described by Blatchley as Ouadifrons castaneus, from Florida, is very different in the structure of the front tibiæ which, from description, would seem more like those of Thalycra. In Ouadrifrons the labrum is said to be rounded and not emarginate, while in both species of Perthalycra it is bilobed.

I am indebted to Mr. E. A. Schwarz for assistance in the way of suggestions and in giving me access to the specimens of *Perthalycra* and allied genera in the National Collection.

Osmoderma montana, new species

General form and luster similar to that of the same sex (female) of O. eremicola, but smaller, relatively more slender and with a more æneous tinge. In comparison with a female O. eremicola from Lone Rock, Wis., which was selected as representing a markedly northwestern locality, it is seen that montana has a shorter clypeo-frontal plate, the rugæ of the central part of which are transverse instead of concentric; the pronotum is slightly more

narrowed behind, the median depression almost abruptly terminated at about the middle instead of being continued backwards as in *O. eremicola*; the surface of the pronotum has deep, rather variolose punctuation extending entirely across the disk behind the depression in place of the minute points seen in *O. eremicola*; and the scutellum, while of similar form, is more coarsely punctate, lacking the smooth median area. In *O. montana*, the elytra are rougher, the punctuation coarser, less regularly arranged in striæ near the suture; the pygidium is more elongate-triangular and less densely hairy. Body beneath, similar in the two species. Total length, 21.75 mm; elytron, along line of greatest length, 13.25 mm.: humeral width, across elytra, 9.25 mm.; greatest width, 10 mm. The corresponding measurements on the specimen of *O. eremicola* are 29.30, 17.20, 12.90 and 14 mm.

Type.—No. 23728, U. S. National Müseum.

The holotype is a female collected by M. A. Hanna of the U. S. Biological Survey at a point 18 miles south of Dry Creek, Montana, southwest of Lismas in Valley County. It is now in the collection of the United States National Museum.

If the superficial characters set forth above were the only basis of separation, I should hardly care to give the Montana specimen a name, but dissection of the genitalia shows that they are different from those of the Wisconsin example of O. eremicola. The chitinized portions, in the female Osmoderma, are composed of a pair of broad, irregularly oval pieces, nearly flat-bottomed with reflexed margins, which may correspond to the "inferior plates" described and figured by Smith in his work on the genitalia of Lachnosterna (Proc. U. S. N. M., XI, 1888, p. 485, et seg.). These are similar in O. eremicola*and O. montana, though not identical. Opposed to these plates are four other chitinous structures, the outer pair of which are probably the equivalent of Smith's "superior plates," while the inner are likely the representatives of what he calls the "pubic process." Comparison of these four pieces in the two species of Osmoderma under discussion shows that they are decidedly rougher and more deeply grooved in O. montana.

Incidentally, dissections were made of the male genitalia of the American O. eremicola and scabra, and of the European O. eremita. These are fully as characteristic in each instance as those of our species of Lachnosterna and would indicate the propriety of investigating these parts in describing new Scarabæidæ.

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